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A STRANGE ABNORMALITY IN THE CIRCULATORY SYSTEM OF THE COMMON RABBIT (*LEPUS SYLVATICUS*).

JAMES ROLLIN SLONAKER.

IN the March number of the *Naturalist* an article appeared "On the Frequency of Abnormalities in Connection with the Postcaval Vein and its Tributaries in the Domestic Cat (*Felis domestica*).” Such variations are quite familiar to those who have charge of laboratory work in vertebrate anatomy. The abnormalities are, however, by no means confined to the region indicated in the above article. They are common to other parts of the circulatory system.

Though the author does not discuss the probable causes of these abnormalities, he suggests that they may be due in part to "domestication, in breeding, disease, drugs, and shock."

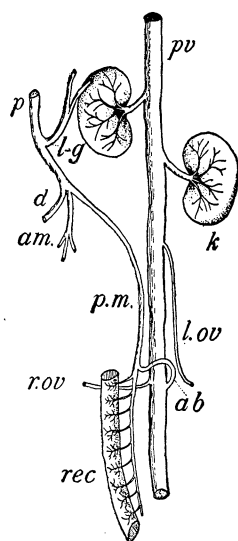
I have found that abnormalities in the circulatory system are not confined to the domesticated cat, but are also of frequent occurrence in the common gray rabbit.

The most noticeable variation that I have found, and the only one which I shall describe, was found in the venous system of the rabbit. I have found it but once and, as I have seen no mention of such an occurrence in the literature pertaining to this subject, I will describe it.

In injecting the posterior vena cava from the heart I was amazed by the rapid filling of the portal veins. This continued until they were as well injected as the other veins of the body. The injecting fluid used was a starch mass which was too coarse to pass from the vena cava through the capillaries of the liver into the portal vein. The inference was that there was a vein of sufficient size forming a direct connection between the portal vein and the posterior vena cava.

Careful dissection showed this supposition to be true. A small vein extended from the posterior mesenteric and united

with the posterior vena cava on the left side, just opposite the right ovarian vein. This connecting branch was not modified



from some of the branches of the vena cava normally belonging to this region, since these were all present. It may possibly have been one of the original branches composing the posterior mesenteric which had in some way become attached to the vena cava.

Some correlation might be made with the birds, since they have the portal vein and the posterior vena cava normally connected by the posterior mesenteric and the hypogastric veins. Such is, however, not justifiable, for this is, so far as I know, the only record of such an existence in mammals. It is best, therefore, to consider it strictly as an abnormality and in no sense a reversion to some possible past condition.

In conclusion I may add that, though no attempt will be made to account for the causes leading to these abnormalities in cats and rabbits, I do not feel that

domestication should be mentioned as a possible cause, since these variations occur as frequently in the wild rabbit as in the domesticated cat.

a.b., abnormal connecting vein ;
a.m., anterior mesenteric vein ;
d., duodenal vein ; *k.*, kidney ;
l-g., lieneo-gastric vein ; *l.ov.*,
 left ovarian vein ; *p.*, portal
 vein ; *p.m.*, posterior mesen-
 teric vein, *p.v.*, posterior vena
 cava ; *rec.*, rectum ; *r.ov.*, right
 ovarian vein.